## STIC, Biotech/ChemLib

From:

Li, Ruixiang

Sent:

Tuesday, August 13, 2002 11:13 AM STIC-Biotech/ChemLib

To: Subject:

Sequence search of Application NO:09/898,586

Please do a standard search on SEQ ID NO: 24 against both commercial and interference nucleic acid databases.

Thank you very much!

Ruixiang Li GAU 1646 CM1 10E18 Mail Box 10C01 306-0282

> Point of Contact P. Sheppard Telephone number: (703) 308-4499

Searcher: \_\_\_\_\_ Phone: \_\_\_\_\_ Location: \_\_\_\_\_ Date Picked Up:

Date Completed: 8/23/02 Searcher Prep/Review: \_\_\_\_\_ Clerical: \_\_\_\_\_\_Online time: \_\_\_\_\_

TYPE OF SEARCH: NA Sequences: \_\_\_\_\_ AA Sequences: \_\_\_\_\_ Structures: \_\_\_\_\_ Bibliographic: \_\_\_\_\_ Litigation: \_\_\_\_\_ Full text: Patent Family: \_\_\_\_\_ Other: \_\_\_\_\_

VENDOR/COST (where applic.) STN: \_\_\_\_\_\_DIALOG: \_\_\_\_\_ Questel/Orbit: \_\_\_\_\_ DRLink: \_\_\_\_\_ Lexis/Nexis: \_\_\_\_\_ Sequence Sys.: \_\_\_\_\_ WWW/Internet: \_\_\_\_\_ Other (specify): \_\_\_\_\_

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1 Documentation ...

1 AX078373 Sequence 41 from Pater 1012 | AX197456 Sequence 21 from Pater 20004889 | Homo sapiens clone 30 | AX241442 Sequence 399 from Pater 1040 | AX197438 Sequence 39 from Pater 1040 | AX197438 Sequence 34 from Pater 1040 | AX197458 Sequence 34 from Pater 1040 | AX197458 Sequence 23 from Pater 1040 | AX197458 Sequence 34 from Pater 1040 | AX197458 Sequence 34 from Pater 1040 | AX197458 Sequence 936 from Pater 1040 | AX1973100 Mus musculus olfactory 1040 | AX1973100 Mus musculus olfactory 1040 | AX1973100 Mus musculus olfactory 1040 | AX1973724 Mus musculus olfactory 1040 | AX1973724 Mus musculus olfactory 1040 | AX1973443 Mus musculus olfactory 1040 | AX1973440 Mus musculus olfactory 1040 | AX197340 | AX197340
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1 (bases 1 to 974)
Au-Young, J., Bandman, O., Tang, Y.T., Yue, H., Azimzai, Y., Bur Baughn, M.R., Lu, D.A., Hillman, J.L., Patterson, C. and Lal, P. Receptors and associated proteins
Patent: WO 0107612-A 41 01-FEB-2001;
Incyte Genomics, Inc. (US)
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AX078373

Sequence 41 from Patent W00107612

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                                              Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 1012)
Padigaru,M., Prayaga,S.K., Taupier,R.J., Mishra,V., Tchernev,V.T.
Spytek,K.A. and Li,L.
Odorant receptor polypeptides and nucleic acids encoding same
Patent: WO 0151632-A 21 19-JUL-2001;
Curagen Corporation (US)
                       219
                                       receptor polypeptides and nucleic WO 0151632-A 21 19-JUL-2001; Corporation (US)
Location/Qualifiers
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ERSION AC004889.1 GI:41561
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Mammalia; Eutheria; Primates;
1 (bases 1 to 130030)
Waterston, R.H.
The sequence of Homo sapiens c
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Direct Submission
Submitted (14-JAN-1999) Genome S
University School of Medicine, 4
MO 63108, USA
On Jan 14, 1999 this sequence ve
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Waterston, R.H.
Direct Submission
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1 (bases 1 to 930)
Bellenson, J., Smith, D., Lancet, D., Glusman, G., I
Yanai, I.
Olfactory receptor sequences
Patent: WO 0127158-A 939 19-APR-2001;
Digiscents (US); YEDA RESEARCH AND DEVELOPMENT
Location/Qualifiers
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E 1 (bases 1 to 930)
S Bellenson, J., Smith, D., Lancet, D., Glusman, G., Fuchs, T. and Yanai, I.
Olfactory receptor sequences
patent: wo 0127158-A 190 19-APR-2001;
Digiscents (US); YEDA RESEARCH AND DEVELOPMENT COMPANY, LT)
Cocation/Qualifiers
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1 (bases 1 to 1040)

Padigaru, M., Prayaga, S.K., Taupier, R.J., Mishra, V., Spytek, K.A. and Li, L.

Odorant receptor polypeptides and nucleic acids encontent: WO 0151632-A 3 19-JUL-2001;

Curagen Corporation (US)

Location/Qualifiers

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Submitted (05-JUL-2000) Sanger Centre, Hinxton, Cambridgeshire, CB10 15A, UK. E-mail enquiries: humquery@sanger.ac.uk Clone requests: clonerequest@sanger.ac.uk
On Mar 6, 2000 this sequence version replaced gi:7105768.
During sequence assembly data is compared from overlapping clouds assembly data is compared as variations
Where differences are found these are annotated as variations together with a note of the overlapping clone name. Note that the variation annotation may not be found in the sequence submission corresponding to the overlapping clone, as we submit sequences wit only a small overlap as described above. This sequence has been finished according to sequence map criteria as follows. An attempt is made to resolve all sequencing problems, such as compressions and repeats, but not necessarily within known annotated human repeat sequence elements (e.g. Alu). Where the sequence is ambiguous, there is an annotation using the 'unsure'
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Figure 100 bp DNA linear PRI 20-JUL-2000 Human DNA sequence from clone RP5-1005Hll on chromosome 6 Contains part of the gene for a 7 transmembrane receptor (rhodopsin family) (olfactory receptor like) protein, the gene for WUGSC:H_DJ0988Gl5.3 protein, part of the PDNP3 (phosphodiesterase I/nucleotide pyrophosphatase 3) gene, ESTs, STSs and GSSs, complete sequence.

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                                   all sequencing problems, necessarily within known
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The following abbreviations are used to associate primary accession numbers given in the feature table with their source databases:
Em:, EMBL; Sw:, SWISSPROT; Tr:, TREMBL; Wp:, WORMPEP; Information on the WORMPEP database can be found at http://www.sanger.ac.uk/Projects/C_elegans/wormpep This sequence was generated from part of bacterial clone contigs of human chromosome 6, constructed by the Sanger Centre Chromosome 6 Mapping Group. Further information can be found at http://www.sanger.ac.uk/HGP/Chr6
RP5-1005H11 is from the library RPCI-5 constructed at the Roswell Park Cancer Institute by the group of Pieter de Jong. For further details see http://bacpac.med.buffalo.edu/
VECTOR: pCYPAC2
IMPORTANT: This sequence is not the entire insert of clone RP5-1005H11 It may be shorter because we sequence overlapping sections only once, except for a 100 base overlap.
The true right end of clone RP5-1005H11 is at 59130 in this sequence. The true right end of clone RP5-914N13 is at 105 in this sequence.
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5891. .6180
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870. .
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15340.
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14280. .14383
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7607. .7618
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                                                                    te="Alusg/x repeat: 40. 15508
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e-"AluJo repeat: matches
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2906
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                                       uz repeat:
.15968
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14176)
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17867. 18162
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.23543)
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                                              leMetThrTrpArgValCysIleThrLeuAlaValThrSerTrpThrThr
                 GlyValLeuLeuSerLeuIleHisLeuValLeuLeuLeuProLeuProPh
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Waterston, R.H.
Direct Submission
Submitted (14-JAN-1999) Genome S
University School of Medicine, 4
MO 63108, USA
Waterston, R.
Direct Submission
Submitted (15-JAN-1999) Doniversity, 4444 Forest P.
5 (bases 1 to 140915)
Waterston, R.
Direct Submission
                                                                                                                                                                                                                     Homo sapiens
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
1 (bases 1 to 140915)
Hou,S., Wohldmann,P. and Le,T
                                                                                                                                                                                                                                                                                              Homo sapiens PAC clone
AC005587
AC005587.1 GI:4156166
                                                                                                                                        Direct Submission
Submitted (01-SEP-1998) Genome
University School of Medicine,
MO 63108, USA
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Direct Submiss
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Unpublished
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RP5-988G15
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The sequence of this clone was established as part of a sequencing collaboration between the NHGRI Chromosome 7 Project (Eric D. Green, Director), John D. McPherson in Department of Genetics (Washington University), and the University Genome Sequencing Center. For additional infabout the map position of this sequence, see http://www.nhgri.nih.gov/DIR/GTB/CHR7, send mailto:egreen@nhgri.nih.gov, or see http://genome.wustl
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Location/Qualifiers

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                                                                                                                                                                                                                                                                                                                                                                                     The clone may be obtained either from Genon (http://www.genomesystems.com) or Research (http://www.resgen.com); or from Pieter de VECTOR: pCYPAC2
                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE INFORMATION: This clone was derived from human PAC library RPCI-5, prepared by This clone was derived from human PAC library RPCI-5, prepared by Pieter de Jong and coworkers at the Roswell Park Cancer Institute (http://bacpac.med.buffalo.edu) using the method described by Ioannou et al., Nature Genetics 6:84-9 (1994). The library is from Ioannou et al., Nature Genetics 6:84-9 (1994).
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/rpt_family="(TA)n
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1 (bases 1 to 1014)

Padigaru, M., Prayaga, S.K., Taupier, R.J., Mishra, V., Tchernev, V.T. Spytek, K.A. and Li, L.

Odorant receptor polypeptides and nucleic acids encoding same
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AX197458
AX197458.1 GI:15387838
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Location/Qualifiers
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AY073444.1 GI:18480185
                      Eukaryota; Metazoa; Chordata; Craniata; Mammalia; Eutheria; Rodentia; Sciurognat 1 (bases 1 to 933)
Zhang, X. and Firestein, S.
The olfactory receptor gene superfamily Nat. Neurosci. 5 (2), 124-133 (2002)
11802173
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AC091768.4 GI:15
Homo sapiens
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
1 (bases 1 to 104955)
Sulston, J.E. and Waterston, R.
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Submitted (09-JAN-2002) Department of Genetics, Washington Submitted (09-JAN-200
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Center project name: H_NH0703N05
                                                         Web site: http://genome.wustl.edu/gsc
Contact: sapiens@watson.wustl.edu
                                                                                                                                                                            Center: Washington University Genome Sequencing Center Center code: WUGSC
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NOTICE: This sequence may not represent the entire insert of this clone. It may be shorter because we only sequence overlapping clone sections once, or longer because we provide a small overlap between neighboring data submissions.

This sequence was finished as follows unless otherwise noted: all regions were double stranded, sequenced with an alternate chemistry, or covered by high quality data (i.e., phred quality > 30); an attempt was made to resolve all sequencing problems, such as compressions and repeats; all regions were covered by sequence from more than one subclone; and the assembly was confirmed by restriction digest.

MAPPING INFORMATION:
The sequence of this clone was established as part of a mapping and sequencing collaboration between the NHGRI Chromosome 7 Mapping Project (Eric D. Green, Director), John D. McPherson in the Department of Genetics (Washington University), and the Washington University Genome Sequencing Center. For additional information about the map position of this sequence, see http://www.nhgri.nih.gov/DIR/GTB/CHR7, send mailto:egreen@nhgri.nih.gov, or see http://genome.wustl.edu/gsc mapping and Mapping

## SOURCE INFORMATION:

The RPCI-11 human BAC library was made from the blood of one male donor, as described by Osoegawa, K., Woon, P.Y., Zhao, B., Frengen, E., Tateno, M., Catanese, J.J. and de Jong, P.J. (1998) An improved approach for construction of bacterial artificial chromosome libraries. Genomics 51:1-8. The clone may be obtained either from Research Genetics, Inc. (http://www.resgen.com) or Pieter de Jong and coworkers at the Roswell Park Cancer Institute

(http://bacpac.med.buffalo.edu)

VECTOR: pBACe3.6

NEIGHBORING SEQUENCE INFORMATION:
The clone sequenced to the left is RP4-669B10, 2000 bp overlap.
clone sequenced to the right is RP4-798C17, 2000 bp overlap.
Actual start of this clone is at base position 123947 of
RP4-669B10; actual end is at base position 64342 of RP11-798

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FEATURES
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4668 to 4721
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13193. .13485
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10476.
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_family="L2"
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4. .16622
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9. .16333
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. 14177
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22685. .22728
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89.286
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19319. .19982
/rpt_family="L
20126. .20161
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DEFINITION Mus musculus olfactory
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VERSION AY073100.1 GI:18479497
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Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Ve
Mammalia; Eutheria; Rodentia; Sciurognathi
1 (bases 1 to 933)
Zhang, X. and Firestein, S.
The olfactory receptor gene superfamily of
Nat. Neurosci. 5 (2), 124-133 (2002)
                                                                                                        gb_ro:AY073100
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receptor
                             Craniata; Vertebrata; Sciurognathi; Muridae;
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Murinae; Mus
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                       Adams, M.
Direct Submission
Submitted (11-JAN-2002) (
Rockville, MD 20850, USA
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HSLFNPMLNPLIYSLRNKEVKSALKRTLLKEDTS"

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DEFINITION ACCESSION
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Waterston, R.H.

Direct Submission
Submitted (30-JUL-2000) Genome S
University School of Medicine, 4
MO 63108, USA
4 (bases 1 to 66610)
Waterston, R.H.
Direct Submission
Submitted (15-APR-2001) Genome S
                                                                       1 (bases 1 to 66610)
Sulston, J.E. and Waterston, R.
Toward a complete human genome
Genome Res. 8 (11), 1097-1108 (
99063792
2 (bases 1 to 66610)
Cordum, H. and Cotton, M.
The sequence of Homo sapiens BA
Unpublished
3 (bases 1 to 66610)
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AC074386
AC074386.6 G
HTG.
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Eukaryota; Me
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(1998)
                                                                                                                                                         Craniata; V
Catarrhini;
                                         Sequencing Center, Washington 4444 Forest Park Parkway, St.
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6 (bases 1 to 6)
Waterston, R.
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University, 4444 Forest
6 (bases 1 to 66610)
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40 63108, USA
                                                                                                               Submitted (07-NOV-2001) Department of Genetics, Washington Iniversity, 4444 Forest Park Avenue, St. Louis, Missouri 6 on Apr 15, 2001 this sequence version replaced gi:13431207
                                                                                                                                                                                                                                                                                                63100,
(bases 1 t
Web site: http://genome.wustl.edu/gsc
Contact: sapiens@watson.wustl.edu
----- Summary Statistics
Center project name: H_NH0464H01
                                                        Center: Washington University Genome Sequencing Center Center code: WUGSC
Web site: http://genome.wustl.edu/qsc
                                                                                                                                                                                         Submission
                                                                                                                                                                                                                                                                                                                                                          School of Medicine,
                                                                                                                                                                                                                                                                                                                      to 66610)
                                                                                                                                                                                                                                               Department of Genetics, Park Avenue, St. Louis,
                                                                                                                                                                                                                                                                                                                                                           4444 Forest Park Parkway,
                                                                                                                                                                                                                                               Washington
Missouri 63108,
                                                                                                                                                                                                                                                                                                                                                            St.
                                                                                                                                                        USA
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COMMENT

NOTICE: NOTICE: This sequence may not represent the entire insert of this clone. It may be shorter because we only sequence overlapping clone sections once, or longer because we provide a small overlap between neighboring data submissions.

This sequence was finished as follows unless otherwise noted: all regions were double stranded, sequenced with an alternate chemistry, or covered by high quality data (i.e., phred quality >: 30); an attempt was made to resolve all sequencing problems, such as compressions and repeats; all regions were covered by sequence from more than one subclone; and the assembly was confirmed by restriction digest.

MAPPING INFORMATION:
The sequence of this clone was established as part of a mapping and sequencing collaboration between the NHGRI Chromosome 7 Mapping sequencing collaboration between the NHGRI Chromosome 7 Mapping Project (Eric D. Green, Director), John D. McPherson in the Department of Genetics (Washington University), and the Washington University Genome Sequencing Center. For additional information about the map position of this sequence, see http://www.nhgri.nih.gov/DIR/GTB/CHR7, send mapping and Mapping the

SOURCE INFORMATION: The RPCI-11 human B

The RPCI-11 human BAC library was made from the blood of one male donor, as described by Osoegawa, K., Woon, P.Y., Zhao, B., Frengen, E., Tateno, M., Catanese, J.J. and de Jong, P.J. (1998) An improved approach for construction of bacterial artificial chromosome libraries. Genomics 51:1-8. The clone may be obtained either from Research Genetics, Inc. (http://www.resgen.com) or Pieter de Jong and coworkers at the Roswell Park Cancer Institute (http://bacpac.med.buffalo.edu)
VECTOR: pBACe3.6
NEIGHBORING SEQUENCE INFORMATION: The clone sequenced to the left is RP4-798C17, 200 bp overlap; clone sequenced to the right is RP4-545C24, 200 bp overlap. At start of this clone is at base position 98638 of RP4-798C17; at end is at base position 76962 of RP4-545C24. Actual

the There are clone polymorphic base pair differences in the overlap RP11-464H1 and RP4-545C24.
Location/Qualifiers between

actual

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/clone_lib="RPCI-11"
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EST
AI603950
(NID: 94613112)
 ms16c11.y1"
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71/0/		9CQT2
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21657	PERCOCOMPOSITION	21608
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167	ClvValLeulerLeulleHisLeulelLeuLeuleulProLeuProPh	151

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1 BC016940 Homo sapiens, Similar

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Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human
Center, Stanford University School of Medicine, Stanford,
Web site: http://www-shgc.stanford.edu
Contact: (Dickson, Mark) mcd@paxil.stanford.edu
Dickson, M., Schmutz, J., Grimwood, J., Rodriquez, A., and
                                                                                                                                                                                                                                                                                                                                                                    Clone distribution: MGC clone distribution information can be fo
through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Series: IRAK Plate: 27 Row: 1 Column: 22
This clone was selected for full length sequencing because it
passed the following selection criteria: Hexamer frequency ORF
analysis, GenomeScan gene prediction, Similarity but not identit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Direct Submission
Submitted (05-NOV-2001) National Institutes of
Gene Collection (MGC), Cancer Genomics Office,
Institute, 31 Center Drive, Room 11A03, Bethesd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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ANISH Homo sapiens
ELKATyCta; Metazoa; Chordsta; Ci.
ELKATYCta; Metazoa; Cancer Genome Anatomy
Inpublished (1997)

Lonatic; Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov/ncicgar
Insert Length.1098 Std Error: 0.00

Seq priner: -40ml3 fwd. ET from Amersham
High quality sequence stop: 432.
Location/Qualifiers

'noc-"IMAGE:1714922"

'noc-"IMAGE:1714
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Mammalia; Eutheria; Pri
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1 (bases 1 to 60ng, L.
Wang, Y.-G. and Gong, L.
Cloning of FKSG35, a no
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2 (bases 1 to 705)
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Direct Submission
Submitted (13-DEC-
Technology Ltd., 4
Beijing 100050, P.)
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                                                                                                /organism="Homo sapiens"
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/map="7q33-q35"
/tissue_type="liver"
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133. .429
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BE856570

DEFINITION 7f64e08.xl Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone
IMAGE:3299462 3' similar to TR:095047 095047 WUGSC:H_DJ0988G15.2

PROTEIN. ;, mRNA sequence.

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NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Proceedings of the Contact: Robert Start Contac
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Email: cgapbs-r@mail.nih.gov
This clone is available royalty-free tl
IMAGE Consortium (info@image.llnl.gov)
Seq primer: -40UP from Gibco
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/lab_host="DH10B"
/note="Organ: pooled; Vector: pT7T3D-Pac (Pharmacia modified polylinker; Site_1: Not I; Site_2: Eco Equal amounts of plasmid DNA from five normalized in the control of the contr
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                                                                                       /organism="Homo sapiens"
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/note="Organ: colon; Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker; 1st strand cDNA was prepared from colon adenocarcinoma, and was then primed with a Not I oligo(dT) primer. Double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pT7T3 vector. Library is normalized. Library was constructed by Bento Soares and M. Fatima Bonaldo. "

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Mammalia; Eutheria; Primates; Catarrhini
1 (bases 1 to 580)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
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cDNA Library Arrayed by: Incyte Genomics, Inc.
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
plate: LLAM8441 row: i column: 21
High quality sequence start: 3
High quality sequence stop: 580.
Location/Qualifiers
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189 c 125 g 170 t
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LeuLeuGlyAsnGlyThrIleLeuGlyLeuIleSerLeuAspSerArgLe
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Emmert-Buck, M.D., Ph.D.

cDNA Library Preparation: M. Bento Soares, Ph.D.

cDNA Library Arrayed by: Greg Lennon, Ph.D.

DNA Sequencing by: Washington University Genome Second through the I.M.A.G.E. Consortium/LLNL at:

www-bio.llnl.gov/bbrp/image/image.html
Insert Length: 677 Std Error: 0.00

Seq primer: -40UP from Gibco

High quality sequence stop: 411.

Location/Qualifiers
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Tumor Gene Index
Unpublished (1997)
Contact: Robert Strausberg, Ph
Email: cgapbs-r@mail.nih.gov
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Mammalia; Eutheria;
1 (bases 1 to 433)
NCI-CGAP http://www.
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/clone="IMAGE:1874045"
/clone_lib="NCI_CGAP_C08"
/tissue_type="adenocarcinoma"
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Bento Soares
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Cancer Institute, Cancer Genome Ana
                                                                                                                                                                                       /note-"Organ: colon; Vector: pT7T3D-Pac (Pharmacia) with modified polylinker; 1st strand cDNA was prepared from colon adenocarcinoma, and was then primed with a Not I oligo(dT) primer. Double-stranded cDNA was ligated to Ec RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pT7T3 vector. Library is normalized. Library was constructed Bento Soares and M. Fatima Bonaldo. "
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UHISALAProMetTyrPhePheLeuSerHisLeuAlaValValAspIleA
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BG984967

IL5-CN0068-100401-434-d09 C

BG984967

BG984967.1 GI:14387702
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Mammalia; F
                                                                                                                                                                                            sequence tags
Proc. Natl. Acad. Sci. U.S.A. 97 (7), 349
20202663
Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar,
                                                                                                                                                                                                                                                                                                                    l (bases 1 to 443)
Dias Neto, E., Garcia Correa, R., Verjovski-Almeida, S., Briones, M.R., Nagai, M.A., da Silva, W. Jr., Zago, M.A., Bordin, S., Costa, F.F., Goldman, G.H., Carvalho, A.F., Matsukuma, A., Baia, G.S., Simpson, D.H., Brunstein, A., deoliveira, P.S., Bucher, P., Jongeneel, C.V., O'Hare, M.J., Soares, F., Brentani, R.R., Reis, L.F., de Souza, S.J. and Simpson, A.J.
Shotgun sequencing of the human transcriptome with ORF expressed
            Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL (http://www.ludwig.org.br/scripts/gethtml2.pl?t1=IL5&t2=IL5-CN0068-100401-434-d09&t3=2001-04-10&t4=1)
Seq primer: puc 18 forward
High quality sequence stop: 363.
                                                                                                                                          Brazil
Tel: +55-11-2704922
Fax: +55-11-2707001
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ity sequence stop: 363.
Location/Qualifiers
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alignment_scores:
    Quality:
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ORIGIN
seq_documentation_block:
LOCUS AI079550 738 bp mRNA linear EST 29-SEP-1998
DEFINITION oz04f00.x1 Soares_fetal_liver_spleen_lnFLS_S1 Homo sapiens cDNA
clone IMAGE:1674375 3' similar to SW:OLF7_MOUSE P34984 OLFACTORY
RECEPTOR-LIKE PROTEIN K7 ;, mRNA sequence.

ACCESSION AI079550
VERSION AI079550.1 GI:3415801
KEYWORDS EST.
SOURCE human.
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US-09-898-586-2
                                                                                                     seq_name:
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/db_xref="taxon:9606"
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Site_2: SmaI; A mini-library was made by cloning products
derived from ORESTES PCR (U.S. Letters Patent application
No. 196,716 - Ludwig Institute for Cancer Research)
profiles into the pUC 18 vector. Reverse transcription of
tissue mRNA and cDNA amplification were performed under
low stringency conditions."

131 g 81 t 1 others
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US-09-898-586-2
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TITLE
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National Cancer Institute, Cancer Genome Anat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Mammalia; Eutheria; 1 (bases 1 to 738)
euHisProAlaLysProIleSerPheAlaGlyArgMetMetGlnThr
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                                               CAACATCGCCTATGCCTGCAACACAGTGCCCCAGATGCTGGTGAACC
                                                                                                                                                                                                                                                                                        7
                                                                                                                                             TCTTCACCCTGCTGGGGAATGGGACCATCCTGGGGGCTCATCTCACTG
                                                                                                                                                       Unpublished (1997)
                                                           lAspIleAlaTyrAlaCysAsnThrValProArgMetLeuValAsnL
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201 c 135 g 229 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /dev_stage="20 week-post conception fetus"
/lab_host="DH10B (ampicillin resistant)"
/note="Organ: Liver and Spleen; Vector: pT7T3D (Pharmacia)
with a modified polylinker; Site_1: Pac I; Site_2: Eco RI;
This is a subtracted version of the original Soares fetal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:1674375"
/clone_lib="Soares_fetal_liver_spleen_lNFLS.
                                                                                                                                                                                                                                                                                                                                               750.00
4.545
89.189
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Primates;
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134

264 5 57.955

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q_documentation_block:
CUS BH111304
CUS BH111304
FINITION RPCI-24-367N6.TJ R
DNA sequence.
CESSION BH111304
RSION BH111304.1 GI:149
YWORDS GSS.
URCE house mouse.
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TCAAG 738
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2hao,S., Nierman,W., Malek,J., Shatsman,S., Akir Tsegaye,G., Geer,K., Krol,M., Shvartsbeyn,A., Ge Russell,D., de Jong,P. and Fraser,C.M.

Mouse BAC End Sequences from Library RPCI-24

Unpublished (1999)

Contact: Shaying Zhao

Department of Eukaryotic Genomics

The Institute for Genomic Research

9712 Medical Center Dr., Rockville, MD 20850, Utel: 301 838 0200

Fax: 301 838 0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gb_gss:BH111304
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Eukaryota; Metazoa; (
Mammalia; Eutheria; I
' 'bases 1 to 788)
                                                                                                                                                                      Email: szhao@tigr.org
Clones are derived from the mouse BAC library RPCI-24. For BAC library availability, please contact Pieter de Jong (pdejong@mail.cho.org). Clones may be purchased from BACPAC Resources (http://www.chori.org/bacpac/orderingframe.htm). BAC page: http://ww .tigr.org/tdb/bac_ends/mouse/bac_end_intro.html Plate: 367 row: N column: 6
Seq primer: SP6
Class: BAC ends.
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  68
           1. .788
/organism="Mus muscu...../strain="C57BL/6J"
/db_xref="taxon:10090"
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/clone_lib="RPCI-24"
/sex="Male"
/cell_type="Spleen/Brain"
/note="Vector: pTARBAC1; SitRPCI-24 Mouse BAC Library problems of the library was cloned in the library was using MboI par
                                                                                                                                                           Location/Qualifiers
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                     l; Site_1: BamH1; Site_2: BamH1; ary produced by Pieter de Jong. The the pTARBAC1 cloning vector at the partially digested male C57BL/6J
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CGAGAGGAGCAGGAGAAAATTTTGTCACTGTTCCACAGTCTTTTTACCCA 755
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ACCESSION VERSION KEYWORDS SOURCE

ORGANISM

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DEFINITION

seq\_name:

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TITLE JOURNAL COMMENT

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FEATURES

source

REFERENCE AUTHORS

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seq_documentation_block:
LOCUS BF974217
DEFINITION 602243851F1 NIH_MGC_48 How mrna sequence.
ACCESSION BF974217
VERSION BF974217.1 GI:12341432
KEYWORDS EST.
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    Quality:
    Ratio:
    Percent Similarity:
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                                                                                    74
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                                                                                                                                                                                         seg 1/1
                                                NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Louis M. Staudt, M.D., Ph.D.
cDNA Library Preparation: Ling Hong/Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM1205 row: e column: 14
High quality sequence stop: 666.
Location/Qualifiers
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Mammalia; Eutheria;
1 (bases 1 to 671)
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                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/db_xref="taxon:9606"
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/clone_lib="NH1DB (phage-resistant)"
/lab_host="DH1DB (phage-resistant)"
/note="Organ: B-cells; Vector: pOTB7; Site_1: XhoI;
Site_2: EcoRI; cDNA made by oligo-dT priming.
Directionally cloned into EcoRI/XhoI sites using the following 5' adaptor: GGCACGAG(G). Size-selected >500bp for average insert size 1.8kb. Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies).
Note: this is a NIH_MGC Library."
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IMAGE:4334965 5',
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ACCESSION
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LOCUS BF116115
DEFINITION 7n77g04.x1
similar to
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                                                                                    COMMENT
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BF116115
BF116115.1
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Christopher A. Moskaluk, M.D., Ph.D., Michard R. Emmert-Buck, M.D., Ph.D. cDNA Library Preparation: M. Bento Soares, Ph.D. cDNA Library Arrayed by: Christa Prange, The I.M.A.G.E. Consortium DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: NCI-CGAP clone distribution information can
                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 732)

NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.

National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
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                                                                                              Unpublished (1997)
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                                                                                                                 seg 1
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Ratio:
Similarity:
                                                 Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Christopher Moskaluk, M.D., Ph.D.
cDNA Library Preparation: M. Bento Soares, Ph.D.
cDNA Library Arrayed by: Greg Lennon, Ph.D.
DNA Sequencing by: Washington University Genome SecClone distribution: NCI-CGAP clone distribution in: found through the I.M.A.G.E. Consortium/LLNL at: www-bio.llnl.gov/bbrp/image/image.html
Seq primer: -40UP from Gibco
High quality sequence stop: 245.
Location/Qualifiers
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Mammalia; Eut
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AI340119.1
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| ProArgMetLeuValAsnLeuLeuHisProAlaLysProIleSerP
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/tissue_type="adenocarcinoma"
/lab_host="DH10B"
/note="Organ:
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5.270
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Bento Soares
73 c
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Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 to 367)
http://www.ncbi.nlm.nih.gov/ncicgap.
Cancer Institute, Cancer Genome Anatomy Project (CGAP),
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Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Christopher Moskaluk, M.D., Ph.D.

cDNA Library Preparation: M. Bento Soares, Ph.D.

cDNA Library Arrayed by: Greg Lennon, Ph.D.

DNA Sequencing by: Washington University Genome Second through the I.M.A.G.E. Consortium/LLNL at:

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National Cancer Institute, Cancer Genome Ana
Tumor Gene Index
Unpublished (1997)
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/clone_lib="NCI_CGAP_C08"
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                                                                                                                                                                                                                                                                                                         426 bp mRNA linear EST 06-OCT-1995 yr79d08.rl Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:211503 5' similar to SP:OLF7_MOUSE P34984 OLFACTORY RECEPTOR-LIKE PROTEIN K7;, mRNA sequence.
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ACCESSION VERSION KEYWORDS SOURCE

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JOURNAL COMMENT

EFERENC AUTHORS

FEATURES

source

Chordata; Craniata; V Primates; Catarrhini;

Vertebrata; Euteleostomi;
L; Hominidae; Homo.

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COMPUTER: IBM PC COMPATIBLE
COMPUTER: PC DOS/MS-DOS
SOFTWARE: PATENTIN PC-DOS/MS-DOS
SOFTWARE: PATENTION DATA:
APPLICATION NUMBER: US/08/467,948A
FILING DATE: 06-JUN-1995
CLASSIFICATION: 435
PRIOR APPLICATION NUMBER: PCT/US95/04079
FILING DATE: 30-MAR-1995
ATTORNEY/AGENT INFORMATION:
NAME: STEFFE, ERIC K.
REGISTRATION NUMBER: 1688
REFERENCE/DOCKET NUMBER: 1488.1140003
TELEPHONE: 202-371-2600
TELEPHONE: 202-371-2600
TELEPAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 1713 base pairs
TYPE: nucleic acid
STRANDEDNESS: both
TOPOLOGY: both
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/ptodata/2/ina/5A_COMB.seq:US-07-686-591-3 +
/ptodata/2/ina/5A_COMB.seq:US-07-970-715-3 +
/ptodata/2/ina/6A_COMB.seq:US-08-706-281A-15
/ptodata/2/ina/6B_COMB.seq:US-09-097-231-15 +
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NT: CAO, L1.
NT: NI, JIAN
ANT: GENTZ, REINER
ANT: GENTZ, REINER
ANT: BULT, CAROL J.

L'ANT: SUTTON III, GRANGER G.
CANT: ROSEN, CRAIG A.

L'OF INVENTION: Polynucleotides Enc.
BOF INVENTION: Coupled Receptor GF
ER OF SEQUENCES: 30
RESPONDENCE ADDRESS:
DDRESSEE: STERNE, KESSLER, GOLDSTE!
TET: 1100 NEW YORK AVE., NW, SUI'
TSHINGTON
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116..1003
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   US-08-467-948A-1
                                    US-08-467-
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                                                                                          Percent
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from:
                                                                                         Length:
Gaps:
Identity:
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+ 169.00 316.60 6
+ 169.00 316.60 6
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ThrLeuLys
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seq_documentation_block:
; Sequence 1, Application US/08467947A
; Patent No. 6090575
; GENERAL INFORMATION:
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                                                                                                                                      alignment_block:
US-09-898-586-2
                                                                                                                                                                                 alignment_scores:
Quality: 1048.50
Ratio: 4.017
Percent Similarity: 85.574
                                                                                                                                                                                                                                                                                                                                                      APPLICANT: NI, JIAN
APPLICANT: GENTZ, REINER
APPLICANT: BULT, CAROL J.
APPLICANT: BULT, CAROL J.
APPLICANT: SUTTON III, GRANGER G.
APPLICANT: ROSEN, CRAIG A.
TITLE OF INVENTION: Polynucleotides Encoding Human G-I
TITLE OF INVENTION: Coupled Receptor GPR1
NUMBER OF SEQUENCES: 30
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
STREET: 1100 NEW YORK AVE., NW, SUITE 600
CITY: WASHINGTON
STATE: DC
                                                                                                              Align
                                                                                                                                                                                                                                                                   NAME/KEY:
LOCATION:
-08-467-947A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 20005

ZIP: 20005

COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPPY DISK
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN RELEASE #1.0, VE
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/467,947A
FILING DATE: 06-JUN-1995
CLASSIFICATION DATA:
APPLICATION NUMBER: PCT/US95/04079
FILING DATE: 30-MAR-1995
ATTORNEY/AGENT INFORMATION:
NAME: STEFFE, ERIC K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488.11406
TELECOMMENT CATTON INFORMATION:
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                                                                                                                                                                                                                                                                                                                                use pairs street nucleic acid STRANDEDNESS: both TOPOLOGY: hoth
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06-JUN-1995
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30-MAR-1995
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Percent Identity:
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ThrLeuLys :::|||:::
GCCCTCCGA
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seq name: /cgn2\_6/ptodata /2/ina/6A\_COMB.seq:US-08

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127

seq\_documentation\_block: Sequence 5, Application US/08748506

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alignment\_block: US-09-898-586-24 x US-08-748-506-5 alignment\_sc ; MOLECULE T US-08-748-506-5 Align ATTORNEY/AGENT INFORMATION:
REFERENCE/DOCKET NUMBER: 749
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-616-5600
TELEFAX: 312-616-5700
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 966 base pairs ADDRESSEE: Leydig, Voit & Mayer, Ltd.
STREET: Two Prudential Plaza, Suite 4900
CITY: Chicago
STATE: IL
COUNTRY: US
ZIP: 60601-6780
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/08/748,506
FILING DATE: 08-NOV-1996
CLASSIFICATION UMBER: US 60/033,751
PRIOR APPLICATION: 435
PRIOR APPLICATION: 435
CLASSIFICATION: 435
CLASSIFICATION: 435 GENERAL INFORMATION: APPLICAL TITLE OF CORRESPONDENCE ADDRESS: NUMBER 178 128 228 yo6 base pairs
rre: nucleic acid
STRANDEDNESS: down
TOPOLOGY: 69 53 19 98 36 78 28 seg 1 ω GAG Sim TAT TCT Arg AspAsnIleThrSerIleThrGluPheLeuLeuGlyPheProValGl 19 GTG isProAlaLysProIleSerPheAlaGlyArgMetMetGlnThrPheLeu 102 얁 cores: Quality: Ratio: nilarity: QF. AGGCCAGAGAGATCTCTCGGGAGGGATGTGCCACACAGATGTTTTT 7 NT: CACTAACAGGAAATACTCTCATAGTCCTTGCTATTTGTACCAGTCCA f: Ronnett et al.
INVENTION: NOVEL SPERM RECEPTORS
F SEQUENCES: 31 TYPE: to: US-08-748-506-5 DNA (genomic) 609.00 2.819 70.130 Percent Identity: 74940 from: 1 Length: Gaps: :0 40.909 966

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; Sequence 1, Application US/08827291A
; Patent No. 5874243
; GENERAL INFORMATION:
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                                       APPLICANT: Macina, Roberto
APPLICANT: Sathe, Ganesh
TITLE OF INVENTION: NOVEL OLRCC15 RECEPTOR
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: SmithKline Beecham Corporation
STREET: 709 Swedeland Road
CITY: King of Prussia
STATE: PA
COUNTRY:
ZIP: 19406
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
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alignment_block:
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SOFTWARE: FastSEQ for Windows Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/827,291A
FILING DATE: 28-MAR-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
APPLICATION NUMBER:
FILING DATE:
NAME: King, William T
REGISTRATION NUMBER: 30,954
REFERENCE/DOCKET NUMBER: GP50001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-270-5090
TELEFAX: 610-270-5090
TELEX:
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 1290 base pairs
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Ratio:
Percent Similarity:
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MOLECULE TYPE:
8-827-291A-1
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2.742
72.697
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Gaps: 2
Percent Identity: 40.132
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                                                                                                                                                                                                                                                                                                                                  from:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2
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COUNTRY: US
ZIP: 60601-6780
ZIP: 60601-6780
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, '
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/748,506
FILING DATE: 08-NOV-1996
CLASSIFICATION DATA:
APPLICATION NUMBER: US 60/033,751
FILING DATE: 09-NOV-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
REFERENCE/DOCKET NUMBER: 74940
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-616-5600
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TITLE OF INVENTION: NOVEL
NUMBER OF SEQUENCES: 31
CORRESPONDENCE ADDRESS:
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STREET: Two Pr
CITY: Chicago
STATE: IL
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                                                                                                                                                            Version
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alignment_block:
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"ACTERISTICS:
"966 base pairs
"rPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: PM"
"S-08-748-506-7
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 966 base ~~
TYPE: pur'
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TATCACTAACAGGAAATACTCTCATAGCCCTTGCTATTTGTACCAGTCCA
               IleSerGlyLeuValGlyProLeuSerThrIleValValSerTyrMetCy
                                 TTGCCTGTGGTGATACATCCCAAAATGAGGCTGCCATCTTTGTGGCAGCA
                                                euAlaCysAlaAspThrHisIleAsnGluAsnMetValLeuAlaGlyAla
                                                                                                   LeuLeuSerLeuIleHisLeuValLeuLeuLeuProLeuProPheCysAr 169
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TYPE: DNA (genomic)
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Percent Identity:
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COUNTRY: US
ZIP: 60601-6780

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Vel
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/748,506
FILING DATE: 08-NOV-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/033,751
FILING DATE: 09-NOV-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
REFERENCE/DOCKET NUMBER: 74940
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-616-5600
TELEFAX: 312-616-5600
TELEFAX: 312-616-5700
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 966 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
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; Sequence 8, Application US/08748506
; Patent No. 6159707
; GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: NOVEL (
NUMBER OF SEQUENCES: 31
CORRESPONDENCE ADDRESS:
ADDRESSEE: Leydig, Voit &
STREET: Two Prudential Pl
CITY: Chicago
STATE: IL
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Plaza, Suite
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alignment\_scores:
 Quality:
 Ratio:
 Similarity:

578.00 2.714 69.156

Percent

Gaps: Identity:

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                                                   ThrAlaIleIleMetTyrValGlyProArgTyrGlyAsnProLysGluGl
                                                                      AATTCTCGTTGCAGTGCTGGTGATGCCTTCACCTGAGGGGGCGCCACAAAG
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alignment_scores:
    Quality:
    Ratio:
    Percent Similarity:
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US-09-89
                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/08/748,506
FILING DATE: 08-NOV-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/033,751
FILING DATE: 09-NOV-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
REFERENCE/DOCKET NUMBER: 74940
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-616-5700
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 966 base pairs
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GENERAL INFORMATION:
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MOLECULE TYPE:
8-748-506-6
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Release #1.
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STREET: Tw
CITY: Chic
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OPERATING SYSTEM:
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ZIP: 60601-6780
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898-586-24
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                                                                                                                                                                                                                                                                                                                       LENGTH: 966 base pairs TYPE: nucleic acid STRANDEDNESS: double
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OF INVENTION:
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Two Prudential Plaza,
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Suite 4900
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Identity:
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GATTGGCTATACTTGCTCTGTCATACCCAAGATGCTGCAGAGCCTTGTGA
               ValLeuGlyValGluArgAlaLeu 310
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ACTCTCGACCTGAAAAAATTATG
                                                                     GGACAAACTCTTGGCCCTCTTCTACACAGCAGTGACATCCATGCTGAACC
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                                                                                                                                                                                                                                                      laCysAlaAspThrHisIleAsnGluAsnMetValLeuAlaGlyAla
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                                                                                                                                                                                                                                                                                                                                                                                                                                           sLysTyrLeuLeuLeuPheHisSerLeuPheAsnProMetLeuAsnP
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seq\_documenta
; Sequence 5,

ation\_block:

Application US/09085371 6218358

Sequence Patent No

No

GENERAL INFORMATION: APPLICANT: Fireste APPLICANT: Zhao, H

Firestein, St Zhao, Haiqing

Stuart

seq\_name:

/cgn2\_6/ptodata/2/ina/6B\_COMB.seq:US-09-085-371-5

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alignment_scores:
    Quality:
    Ratio:
    Percent Similarity:
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FILE REFERENCE: P01511US2 / 09805059

CURRENT APPLICATION NUMBER: US/09/085,371

CURRENT FILING DATE: 1998-05-19

PRIOR APPLICATION NUMBER: US 08/891,243

PRIOR FILING DATE: 1997-07-10

PRIOR APPLICATION NUMBER: US 60/045,961

PRIOR FILING DATE: 1997-05-07

NUMBER OF SEQ ID NOS: 6

SOFTWARE: PatentIn version 3.0
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US-09-898-586-24 x
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SEQ ID NO 5
LENGTH: 900
TYPE: DNA
ORGANISM: Rat
-09-085-371-5
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seq_name:
                                                            APPLICATION NUMBER: US 60/033
FILING DATE: 09-NOV-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
REFERENCE/DOCKET NUMBER: 7494
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-616-5600
TELEFAX: 312-616-5700
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 984 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             q_documentation_block:
Sequence 9, Application US/08748506
Patent No. 6159707
GENERAL INFORMATION:
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CITY: C
STATE:
COUNTRY:
COMPUTER F
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CORRESPONDENC
ADDRESSEE:
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APPLICATION NUMBER: US/08/748,506

FILING DATE: 08-NOV-1996

CLASSIFICATION: 435

PRIOR APPLICATION DATA:
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-748-506-9
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
                                     LENGTH: 984 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
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60601-6780
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PPLICATION DATA:
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NIVENTION: NOVEL SPERM RECEPTORS

DE SEQUENCES: 31

NDENCE ADDRESS:

SSEE: Leydig, Voit & Mayer, Ltd.

P: Two Prudential Plaza, Suite 4900
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E: DNA
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452.00

Length:

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lignment\_block: US-09-898-586-24 x US-08-748-506-9

Percent

Ratio: Similarity:

2.216 67.77

Align seg 1/1

to: US-08-748-506-9

from:

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 sLysTyrLeuLeuLeuPheHisSerLeuPheAsnProMetLeuAsnProL
                  AGTAGTCACCATAGTGAGACTCCCTTCAGCCAGGGAGCGACAGAGAGCTT
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APPLICANT: Solk, John
APPLICANT: Day, Craig
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
FILE REFERENCE: 210121.427C9
CURRENT APPLICATION NUMBER: US/09/439,313
CURRENT FILING DATE: 1999-11-12
NUMBER OF SEQ ID NOS: 575
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 526
                                                                                                                                                                                                                                                                                                                                 ; TYPE: DNA; ORGANISM: US-09-439-313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            seq_document
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US-09-898-586-24 x
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526, Application US/09439313
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Fanger, Gary
Retter, Mark
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Dillon, Davin C
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Length: Gaps: Identity:

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AGATCCTTGCCCTTTTCTGGTTTGATTCCCCGAGAGATTAGCTTTGAGGCC

112

285

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seq_documentation_block:
    Sequence 2, Application US/08988876
    Patent No. 6063596
    GENERAL INFORMATION:
    APPLICANT: Lal, Preeti
    APPLICANT: Bandman, Olga
    APPLICANT: Hillman, Jennifer L.
    APPLICANT: Yue, Henry
    TITLE OF INVENTION: G PROTEIN COU
    TITLE OF INVENTION: WITH IMMUNE R
    NUMBER OF SEQUENCES: 9
    CORRESPONDENCE ADDRESS:
                                                                                                                                                                               seq_name:
APPLICANT: Lal, Preeti
APPLICANT: Bandman, Olga
APPLICANT: Hillman, Jennifer L.
APPLICANT: Yue, Henry
TITLE OF INVENTION: G PROTEIN COUPLED RECEPTORS
TITLE OF INVENTION: WITH IMMUNE RESPONSE
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
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CLONE: 364702
3-08-988-876-2
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COUNTRY: USA
ZIP: 94304
COMPUTER READAB
MEDIUM TYPE:
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FILING
ATTORNEY,
NAME:
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LENGTH:
TYPE: n
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PRIOR APPLICATION DATA:

APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-855-0555
TELEFAX: 650-845-4166
104
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LENGTH: 1828 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
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STREET
CITY:
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Quality:
Ratio:
Nilarity:
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                              TGCTGGGGAACCTGCTCATCATCCTGGCCATCAGCCCTGACTCCCAC
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PR: PF-0441 US
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Gaps:
Percent Identity:
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seq_name:
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                                                                                                                                                                                  Sequence 1, Application US/08465980 Patent No. 5756309 GENERAL INFORMATION:
                                                                   APPLICANT: Rosen, Craig A.
APPLICANT: Ruben, Steven M.
TITLE OF INVENTION: HUMAN G-PRO
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BA
ADDRESSEE: STUART & OLSTEIN
STREET: 6 Becker Farm Road
ADDRESSEE: CARELLA, E
ADDRESSEE: STUART & C
STREET: 6 Becker Farm
CITY: Roseland
STATE: New Jersey
COUNTRY: USA
ZIP: 07068
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
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APPLICANT:
APPLICANT:
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Li, Yi
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; MOLECULE TYPE:
; FEATURE:
; NAME/KEY: CD;
LOCATION: 27:
US-08-465-980-1
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SEQUENCE CH
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TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744
IFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
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TYPE: I
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OPERATING SYSTEM: PC-DOS/MS-DOS
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8-586-24 x US-08-465-980-1
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           gTyrLeuAlaIleMetThrTrpArgValCysIleThrLeuAlaVal
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SS: single
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Percent Identity:
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seq_documentation_block:
; sequence 1, Application US/09053303
; Patent No. 5948890
; GENERAL INFORMATION:
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COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, V

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/053,303

FILING DATE:

CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Soppet, Daniel R.
APPLICANT: Li, Yi
APPLICANT: Rosen, Craig A.
APPLICANT: Ruben, Steven M.
TITLE OF INVENTION: HUMAN G-I
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE,
ADDRESSEE: STUART & OLSTEIL
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                                                                                                                                                                                                                                                                                                                                                                                         STREET: 6 Becker | CITY: Roseland | STATE: New Jersey
                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
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E: STUART & OLSTEIN
6 Becker Farm Road
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TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 1474 base pairs
TYPE: PROPER SEA
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TOPOLOGY: lir
MOLECULE TYPE:
FEATURE:
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3 DATE: 06-JUN-1995
Y/AGENT INFORMATION:
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GENERAL INFORMATION:
APPLICANT: Soppet,
APPLICANT: Li, Yi
APPLICANT: Rosen,
                                                                                                                                                                                                                                                                                                                                                                                                   eq_documentation_block:
                                                                             ZIP: 07068
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, V
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/07093
FILING DATE:
                                                                                                                                                                                                                                                                                APPLICANT: Rosen, Craig A. APPLICANT: Ruben, Steven M. TITLE OF INVENTION: HUMAN COURSE OF SEQUENCES
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CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/465,
FILING DATE: 06-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Ferraro, Gregory D.
                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
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STATE: New
COUNTRY: USA
7TP: 07068
PFADABI
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TYPE: nuc

STRANDEDNE

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FEATURE:

NAME/KEY:

LOCATION:

PCT-US95-07093-1
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REFERENCE/DOCKET NUMBER: 325800-446
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 1474 base pairs
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seq_documentation_block:
Sequence 17, Application
Patent No. 6100048
GENERAL INFORMATION:
APPLICANT: Cone, Rog
APPLICANT: Boston, H
APPLICANT: Kesterton
APPLICANT: Chen, Wet
APPLICANT: Chen, Wet
TITLE OF INVENTION:
TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 17, Application US/08706281A Patent No. 6100048 GENERAL INFORMATION:
APPLICANT: Cone, Koger D
APPLICANT: Fan, Wei
APPLICANT: Boston, Bruce A
APPLICANT: Kesterton, Robert A
APPLICANT: Lu, Dongsi
APPLICANT: Lu, Dongsi
APPLICANT: Chen, Wenbiao
TITLE OF INVENTION: Methods and Reagents
TITLE OF INVENTION: To Modulate Feeding B
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
ADDRESSE: McDonnell Boehnen Hulbert &
STREET: 300 South Wacker Drive
CITY: Chicago
STATE: IL
COUNTRY: USA
ZIP: 60606
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER READABLE FORM:
MEDIUM TYPE: Patentin Release #1.0, Versio
SOFTWARE: Patentin Release #1.0, Versio
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/706,281A
FILING DATE: 04-SEP-1996
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: No. 6100048nan, Kevin E
REGISTRATION NUMBER: 35,303
REFERENCE/DOCKET NUMBER: 96,886
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-913-0001
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TELEX:
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 978 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
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FEATURE:
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llarity:
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300	LeuLysArgValLeu 304
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analyzing
                                                                                                                                                                                                                                                                                                                                       The present invention relates to human single exon nucleic acid probes (SENP). The present sequence is one such probe. The SENPs are derived from human HeLa cells. The SENPs can be used to produce a single exon microarray, which can be used for measuring human gene expression in a sample derived from human cervical epithelial cells. By measuring gene expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably cervical cancer.

Note: The sequence data for this patent did not form part of the printe specification, but was obtained in electronic format directly from WIPC at ftp.wipo.int/pub/published_pct_sequences.
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g gene expression in human cervical epithelial cell
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euPheSerThrPheAlaValThrGluCysLeuLeuLeuValValMe
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2000US-0207456.

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seq_name:
                         documentation_block: ABA68294 standard;
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TTTGGCAGTGCCATCATGTACATGGCCCCCCAAGTCCCGCCATCCTGA
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foetal
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seq ID AC AC DT DT

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analyzi
                                                                                                                                                                                                                                                                                   The invention relates to a single exon nucleic acid probe for measuring human gene expression in a sample derived from human foetal liver. The single exon nucleic acid probes may be used for predicting, measuring and displaying gene expression in samples derived from human fetal liver. The present sequence is a single exon nucleic acid probe of the invention.

Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
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2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-0236359.
2000GB-0024263.
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documentation_block ABA50343 standard;
Human; m:
disease;
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                                                                          LysargValLeuGlyValGlu 307 :::|||:::||||| ||| || || || || || AGGAGAGCACTGGGCAAGGAA 921
                                                                                               euAsnProLeuIleCysSerLeuArgAsnSerGluValLysAsnThrLeu
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||TAACCCCCTGATTTACAGCCTGAGGAACGGAGAGGGTCAAGGGTGCCCTG
                                                                                                                     /SIDS1/gcgdata
                breast
    microarray;
cancer;
                cell
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    single
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                          entry)
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                nucleic
     probe;
     gene
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                probe
     expression;
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      breast;
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The invention relates to a spatially-addressable set of single exon nucleic acid probes for measuring gene expression in a sample derived from human breast and BT 474 cells. The method involves contacting the probes with a collection of detectably labelled nucleic acids derived from mRNA of human breast, and then measuring the label bound to each probe of the microarray. The probes are useful for verifying the expression of regions of genomic DNA predicted to encode proteins. They are useful for gene discovery, and for determining predisposition and/or prognosing breast disease. Gene expression analysis is useful for assessing the toxicity of chemical agents on cells. The microarray of this invention presents a far greater diversity of probes for measuring gene expression, with far less bias than expressed sequence tag microarrays. The method is suitable for rapid production of functional information from genomic sequence. The present sequence is a single exon nucleic acid probe of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-FEB-20
26-MAY-20
30-JUN-20
03-AUG-20
21-SEP-20
27-SEP-20
04-OCT-20
                                                                                                                                                                                                                                                                                                                                            New spatially-addressable set of single exon nucleic acid probes, useful for measuring gene expression in sample derived from human breast, comprises number of single exon nucleic acid probes
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2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-0236359.
2000GB-0024263.
вP;
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243 A;
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220 C;
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   303
G;
167 T; 0 other;
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alignment_block:
US-09-898-586-2
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oValGlyProArgIleGlnMetLeuLeuPheGlyLeuPheSerLeuPheT:::||||||||||||
                                             ATGGGGGAAAATCAGACAATGGTCACAGAGTTCCTCCTACTGGGATTTCT
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Gaps:
Identity:
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34

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AspS

erArgLeuHisAlaProMetTyrPhePheLeuSerHisLeuAlaVa

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CCTGGGCCCAAGGATTCAGATGCTCCTCTTTGGGCTCTTCTCCCTGTTCT

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AAH32363 standard;
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olfactory
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930 BP;

165 A; 304

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other;

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which encode polypeptides involved in olfactory sensation. The polynucleotides can be used in screening for olfactory agonists and antagonists. The methods allow for the determination of primary scents and the identification of the odour receptors used to detect these primary scents. The methods also enable determination of secondary scents and the identification of combinations of odour receptors that are involved in detecting such secondary scents. This enables the construction of a scent representation (also called a scent fingerprint or scent profile), which may be used to re-create and edit scents. Libraries of olfactory receptors are useful for determining the interaction pattern of a composition with the receptors and can be used for determining differences in the olfactory faculties of different individuals.
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24-FEB-
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The sequence encodes a human G-protein coupled receptor (GPCR)-like protein. The GPCR-like polypeptides and polynucleotides are useful for the treatment of diseases of ophthalmic, neurological (e.g Alzheimer's disease and Parkinson's disease, immunological (e.g HIV infection and candidiasis), autoimmune disorders (e.g multiple sclerosis, systemic lupus erythematosus and rheumatoid arthritis), platelet disorders (e.g. thrombocytopaenia and aplastic anaemia), inflammatory disorders (e.g. septic shock and systemic inflammatory response syndrome, SIRS) and nephritic systems. They may also be used to treat hormonal dysfunction, cancer, atherosclerosis, wounds, tissue regeneration, haemophilia, cheach type of disorder are given in the specification. Anti-GPCR-like protein antibodies are useful for detecting or quantitating the polypeptides can also be used as molecular weight markers and as a food supplement.
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alignment_scores:
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Ratio: 4.246 Gaps: 0
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alignment_block:
US-09-898-586-24 x AAS08654 ..
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Align seg 1/1 to: AAS08654 from: 1 to: 2735

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The sequence encodes a human G-protein coupled receptor (GPCR)-like protein. The GPCR-like polypeptides and polynucleotides are useful for the treatment of diseases of ophthalmic, neurological (e.g Alzheimer's C disease and Parkinson's disease, immunological (e.g HIV infection and C candidiasis), autoimmune disorders (e.g multiple sclerosis, systemic lupus erythematosus and rheumatoid arthritis), platelet disorders (e.g. thrombocytopaenia and aplastic anaemia), inflammatory disorders (e.g. septic shock and systemic inflammatory response syndrome, SIRS) and C cancer, atherosclerosis, wounds, tissue regeneration, haemophilia, leukaemias, reperfusion injury, psoriasis and diabetes. Numerous examples of each type of disorder are given in the specification. Anti-GPCR-like polypeptide in antibodies are useful for detecting or quantitating the colypeptide in tissue. The polypeptides can also be used as molecular weight markers and as a food supplement.
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US-09-898-586-24 x ABA09073/rev

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sequences ABB10981-ABB12330 represent 1350 novel human polypeptides, and sequences ABB08225-ABA08254 represent nucleic acids encoding them. The invention also relates to vectors and recombinant bost cells comportant antibodies against the polypeptides, methods of producing the novel polypeptides of the invention, methods of producing the novel polypeptides of the invention have homology to known proteins, thereby polypeptides in a sample, and methods of identifying compounds which to bind to polypeptides of the invention hathough novel, many of the polypeptides of the invention have homology to known proteins, thereby giving an insight into their probable biological activities, and hence potential therapeutic applications. The polypeptides of the invention may favor activity activity is the problem to reall differentiation activities; including cytokine, cell problematic or chemotactic or chemotancity activity; itsue growth activity; themmonopoletis regulatory activity or inhibin-related activities; chemotactic or chemotancity activity; itsue growth activity; themmonopoletic activities; receptor or ligand activities; or may be protein or gent therapetides and nucleotides of the invention are useful for preventing, treating or ameliorating medical conditions, e.g., by protein or gene therapet. Such conditions include cancers, haematopoletic disorders (e.g., osteoporosis), and abnormal vascular growth. Polypeptides involved with tissue regeneration and arterial ischaemla, bone disorders (e.g., osteoporosis), and abnormal vascular growth. Polypeptides involved with tissue regeneration and abnormal composities with growth factor activity may be used to promote wound health of burns, incisions and ulcers), while those with individual cells in culture to give inset to encount of the above conditions, and individual collections in addition to immune disorders. The present sequence cells damaged by lilness, can not altered to a may also be used to the diagnosis of the above conditions, and in drug condition and in drug
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P-PSDB;
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                                                                                                                           factory receptor homologue-encoding cDNA, SEQ ID NO:849.
                                                                                                                                                                                     standard; cDNA; 1315 BP.
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alignment_scores:
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seq_name: /SIDS1/gcgdata/hold-geneseq/geneseqn-emb1/NA2001A.DAT:AAS09946
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13-JAN-
14-JAN-
25-JAN-
26-JAN-
26-JAN-
14-JUL-
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2000US-0175989.

2000US-0176134.

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2000US-0178191.

2000US-0178227.

2000US-0218324.
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1015.1040
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US-09-898-586-2
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                 encode polypeptides involved in olfactory olfactory agonists and antagonists -
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alignment_block:
US-09-898-586-24
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This enables the construction of a scent representation (also called a scent fingerprint or scent profile), which may be used to re-create determining the interaction pattern of a composition with the receptors, and can be used for determining differences in the olfactory faculties of different individuals.
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                                  08-0CT-
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                                                                                       Human; olfactory receptor; OR; primary scent determination; secondary scent determination; polypeptide library; odour r scent profile; scent fingerprint; scent representation; ds.
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AAS09956 standard;
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lence represents the coding sequence of human odorant receptor e protein, NOV11. The NOV11 polypeptide, nucleic acid and are useful as therapeutics, particularly in the manufacture of a int for treating a syndrome associated with a human disease, which a pathology associated with NOV11 polypeptide. The NOV11 nucleic

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Query: US-09-898-586-24
Query length: 310
Database: N_Geneseq_032802:*
Database sequences: 1736436
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21-JUL-1999; 07-OCT-1999; 12-NOV-1999; 01-FEB (INCY-) 2000; 2001. INCYTE 2000WO-US20035. 99US-0145232. 99US-0158578. 99US-0165192. GENOMICS INC

Au-Young Baughn N MR, Ţ Bandman Lu DAM, O, Tang YT Hillman JL, Tang YT, Patterson Yue H, Azimzai Y, Burford

WPI; 20 P-PSDB ъ; 01-168554/17. AAB68889.

Novel reneworks inflamma eceptors and associated proteins for diagnosis and treatment on gical disorders, immunological disorders including autoimmune/eatory disorders and cell proliferative disorders such as cances

Claim ហ Page 125-126; 128pp; English.

The present sequence encodes a human RECAP (receptors and associated proteins) polypeptide. RECAP polynucleotides and polypeptides are useful in the diagnosis, treatment and prevention of neurological disorders such as stroke, Alzheimer's disease, Pick's disease, Huntington's disease, dementia, Parkinson's disease, Downs's syndrome, amyotrophic lateral sclerosis, multiple sclerosis, bacterial and viral meningitis, CJD (Creutzfeldt-Jakob disease), GSS (Gerstmann -Straussler-Scheinker syndrome); immunological disorders, including autoimmune/inflammatory disorders such as AIDS, DiGeorge's syndrome, severe combined immunodeficiency disease (SCID), Chediak-Higashi syndrome, Cushing's disease, Addison's disease, autoimmune thyroiditis, Crohn's disease, diabetes mellitus, Good pasture's syndrome, gout, Grave's diseases, Hashimoto's thyroiditis, Sjogren's syndrome, Werner's syndrome, viral, bacterial, fungal, parasitic, protozoal, and helminthic infections; and cell proliferation disorders such as arteriosclerosis, atherosclerosis, atherosclerosis, hepatitis and cancer. useful

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